Page 3



-- 50. (New) The method of claim 42 wherein the fluid sample is cerebrospinal fluid. --

REMARKS

I. STATUS OF THE CLAIMS

The Examiner stated that claims 41-47 were pending. Claims 41-47 stand rejected. However, it appears to Applicants that claims 42-49 are pending. In their amendment of April 29, 1996, Applicants canceled all pending claims in favor of new claims 42-47. By a facsimile of January 29, 1997 Applicants added new claims 48 and 49. (A copy of that facsimile is attached hereto.) The Examiner did not indicate that this amendment was entered. Applicants request the Examiner to enter this amendment. Applicants have amended claim 42 and added new claim 50. Support for the amendment to claim 42, which is directed to the use of a fluid sample, rather than a CSF sample in particular, finds support on page 24, line 23 of the specification. Therefore, the amendment adds no new matter. Accordingly, claims 42-50 are presented for examination. All pending claims are appended hereto at Appendix 1.

Applicants have amended the specification to refer to U.S. patent 5,604,102. This amendment provides the issued patent number corresponding to the previously deleted application number 08/143,697.

Applicants have amended the specification to include material from page 22, lines 11-31 of application 07/965,972. This material is quoted verbatim. Please note that application 07/965,972 was abandoned in favor of a Rule 62 continuation, i.e., application 08/437,067, which is now issued as United States patent 5,593,846. The above-captioned specification incorporates that material by reference on page 1 of the specification. Accordingly, the material is not new matter.

II. REJECTION UNDER 35 U.S.C. § 103

The claims stand rejected under 35 U.S.C. § 103 as obvious over McConlogue et al. in view of Marotta et al., Suzuki et al. and Vigo-Pelfrey et al. Applicants request reconsideration.

PETER A. SEUBERT ET AL.

Application No.: 08/466,554

Page 4

Applicants present herewith a copy of a Declaration Pursuant To 37 C.F.R. § 1.131 of Peter A. Seubert, Carmen Vigo-Pelfrey, Dale B. Shenk and Robin Barbour, the individuals named as inventors in the above-captioned application. This declaration was submitted in connection with United States patent application 08/339,141, of whose filing date the above-captioned application claims the benefit. In their declaration, the inventors present evidence that they invented methods of measuring soluble $A\beta(x-\geq 41)$ before January 1994. The Examiner cited Suzuki et al. as teaching a sandwich immunoassay for detecting $A\beta(1-42)$ in a fluid sample. However, the Suzuki et al. article indicates a publication date of May 28, 1994. Because the inventors invented methods of detecting $A\beta(x-\geq 41)$ before the indicated publication date of Suzuki et al., that reference is not citable as prior art under 35 U.S.C. § 102(a)/§ 103(a). The other cited references do not teach the specific detection of $A\beta(x-\geq 41)$. Therefore, they do not, in combination, render the claimed invention obvious. Accordingly, Applicants request the Examiner to withdraw the rejection.

III. CLAIMS 47 AND 48

Claims 47 and 48 refer to specifically detecting A β (1-42). Applicants wish to show here that the specification provides written description for these claims.

First, the specification contains a written description of specifically detecting $A\beta(1-42)$. The specification discloses the detection of $A\beta(x-\geq 41)$. The specification states, on page 19, in the paragraph beginning on line 8, that a sandwich assay includes antibodies that can distinguish A β from other fragments of β APP. An antibody that recognizes the amino terminus of $A\beta$ certainly is an example of this. The specification also specifically mentions $A\beta(1-42)$ at several places. For example, on page 24, in Table 1, Applicants specifically refer to $A\beta(1-42)$: "A β 1-42 (pg/ml) cutoff."

Furthermore, as evidence that the inventors were in possession of the invention, the specification states on page 19, lines 25-28, that antibodies for use in the invention are described in United States patent application 07/965,972. The specification incorporates the disclosure of the '972 application by reference. (See, e.g., page 1, lines 7-11.) The '972 application discloses antibody 6C6. Antibody 6C6 is directed to amino acids 1-16 of $A\beta$. Using antibody 6C6 in the assays of this invention allows one to specifically detect $A\beta(1-42)$. Therefore, the inventors were in possession of this embodiment of the

PATENT

Application No.: 08/466,554

Page 5

invention. Applicants have amended the specification to include the relevant material from 07/965,972.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (415) 576-0200.

TOWNSEND and TOWNSEND and CREW LLP Two Embarcadero Center, 8th Floor San Francisco, CA 94111-3834

ph: (415) 576-0200 fax: (415) 576-0300

j:\athena\2120\2120.am2

Respectfully submitted,

Jun Storella Reg. No. 32,944 PETER A. SEUBERT ET AL. Application No.: 08/466,554

Page 6

APPENDIX 1 -- PENDING CLAIMS

42. (Twice amended) A method for screening a compound to determine its ability to alter the amount of an Aβ(x-≥41) peptide in [the CSF] a fluid sample comprising: measuring a first amount of one or more soluble Aβ(x-≥41) peptides in the [CSF] fluid sample of a non-human animal model that exhibits cerebral deposition of Aβ; administering the compound to the non-human animal model; measuring a second amount of said one or more soluble Aβ(x-≥41) peptides

comparing the first amount with the second amount,

in the [CSF] fluid sample of the non-human animal model; and

the difference indicating whether the compound increases, decreases, or leaves unchanged the amount of soluble $A\beta(x-\ge 41)$ in the [CSF] <u>fluid sample</u>.

- 43. (Previously once amended) The method of claim 42 wherein the non-human animal model is a rodent model.
- 44. (Previously once amended) The method of claim 43 wherein the rodent model is a mouse model.
- 45. (Previously once amended) The method of claim 42 wherein the non-human animal model is a transgenic animal model having an expression cassette that drives expression of a sequence which encodes the Swedish mutation of an APP gene.
- 46. (Previously once amended) The method of claim 45 wherein the non-human animal model is a rodent model.
- 47. (Previously once amended) The method of claim 46 wherein the rodent model is a mouse model.
 - 48. (As filed) The method of claim 42 wherein $A\beta(x-\ge 41)$ is $A\beta(x-42)$.

PETER A. SEUBERT ET AL.

Application No.: 08/466,554

Page 7

49. (As filed) The method of claim 48 wherein $A\beta(x-42)$ is $A\beta(1-42)$.

50. (New) The method of claim 42 wherein the fluid sample is cerebrospinal fluid.

<u>PATENT</u>